# EXHIBIT A

6 of 10 DOCUMENTS

Analysis
As of: Feb 06, 2007

**CORNING INCORPORATED and ARTIFICIAL SENSING INSTRUMENTS ASI AG, Plaintiffs, v. SRU BIOSYSTEMS, LLC, SRU BIOSYSTEMS, INC., and SRU HOLDINGS, LLC, Defendants.**

**Civil Action No. 03-633 JJF**

**UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE**

*2004 U.S. Dist. LEXIS 16025*

**August 13, 2004, Decided**

**SUBSEQUENT HISTORY:** Motion granted by, in part, Motion denied by, in part, Motion denied by *Corning Inc. v. SRU Biosystems, 2005 U.S. Dist. LEXIS 22699 (D. Del., Oct. 5, 2005)*

**PRIOR HISTORY:** *Corning Inc. v. SRU Biosystems, LLC, 2004 U.S. Dist. LEXIS 14831 (D. Del., July 7, 2004)*

**DISPOSITION:** [*1] Defendant's Motion for reconsideration was denied.

**COUNSEL:** Richard L. Horwitz, Esquire, and David E. Moore, Esquire of POTTER ANDERSON & CORROON LLP, Wilmington, Delaware. Of Counsel: Kenneth E. Krosin, Esquire, Andrew E. Rawlins, Esquire, Larry L. Shatzer, Esquire, and George C. Best, Esquire of FOLEY & LARDNER LLP, Washington, D.C., for Plaintiffs Corning Incorporated and Artificial Sensing Instruments ASI AG.

Steven J. Balick, Esquire, and John G. Day, Esquire of ASHBY & GEDDES, Wilmington, Delaware. Of Counsel: John J. McDonnell, Esquire, Daniel A. Boehnen, Esquire, Matthew J. Sampson, Esquire, Richard A. Machonkin, Esquire, and Patrick G. Gattari, Esquire of McDONNELL BOEHNEN HULBERT & BERGHOFF LLP, Chicago, Illinois, for Defendants SRU Biosystems, LLC, SRU Biosystems, Inc., and SRU Biosystems Holdings, LLC.

**JUDGES:** JOSEPH J. FARNAN, JR., UNITED STATES DISTRICT JUDGE.

**OPINION BY:** JOSEPH J. FARNAN, JR.

**OPINION:**

**MEMORANDUM OPINION**

**Farnan, District Judge.**

Presently before the Court is the Request For Reconsideration Of July 7, 2004 Order (the "July 7 Order") Granting Plaintiffs' Motion To Compel And Denying SRU's Motion For Protective Order filed by SRU Biosystems, LLC, SRU Biosystems, Inc., and SRU Biosystems [*2] Holdings, LLC (collectively "SRU"). (D.I. 173.) For the reasons that follow, the Court will deny the Motion.

**STANDARD OF REVIEW**

"As a general rule, motions for reconsideration should be granted 'sparingly.'" *Stafford v. Noramco of Del., Inc., 32 Fed. Appx. 32, 2002 U.S. App. LEXIS 6699, 2001 WL 65738 at *1 (D. Del. 2001)* (quoting *Karr v. Castle, 768 F. Supp. 1087, 1090 (D. Del. 1991)).* The purpose in granting motions for reconsideration is to "correct manifest errors of law or fact or to present newly discovered evidence." *Harsco Corp. v. Zlotnicki, 779 F.2d 906, 909 (3d Cir. 1985)* (citing *Keene Corp. v. Int'l Fidelity Ins. Co., 561 F. Supp. 656, 665 (N.D. Ill. 1983)).* Parties should remain mindful that a motion for reconsideration is not merely an opportunity to "accomplish [the] repetition of arguments that were or should have

been presented to the court previously." *Karr, 768 F. Supp. at 1093* (citing *Brambles U.S.A., Inc. v. Blocker, 735 F. Supp. 1239, 1240-41 (D. Del. 1990)*. However, a court should reconsider a prior decision if it overlooked facts or precedent that reasonably would have altered the [*3] result. Id. (citing *Weissman v. Fruchtman, 124 F.R.D. 559, 560 (S.D.N.Y. 1989)*).

**DISCUSSION**

**I. Parties' Contentions**

SRU contends that reconsideration of the July 7 Order is appropriate because the Court incorrectly concluded that granting Corning Incorporated's and Artificial Sensing Instruments ASI AG's (collectively "Corning") Motion to Compel would not deter negotiations with potential bidders for SRU's acquisition. SRU contends that this conclusion was in error because: 1) it assumes that third parties are aware of Corning's lack of interest in acquiring SRU; and 2) it ignores the realities of the business environment in the biosensor industry where potential bidders will feel threatened by Corning's access despite the Protective Order in this case. SRU contends that third parties will be unaware of Corning's lack of interest because Corning filed the motion containing this representation under seal. Moreover, SRU asserts that Corning has never publicly announced that it has no intention to bid for SRU. Finally, SRU contends that the oppression to SRU significantly outweighs any relevance of this information, as was admitted by Corning's [*4] expert

Corning responds that it only sealed the motion containing the representation that it had no intention to bid for SRU because the motion contained SRU's and third parties' confidential information. Corning also attaches a declaration of its corporate representative stating that Corning has no intention to bid for SRU and states that SRU is free to make this declaration public. Further, Corning contends that third parties' misperceptions about the effectiveness of the Protective Order are not grounds to deny the production of relevant information. Finally, Corning asserts that in the July 7 Order the Court correctly concluded that the subject information was relevant.

**II. Decision**

After considering the parties' arguments and the applicable legal principles, the Court concludes that the instant motion should be denied. First, with regard to SRU's contentions about potential bidders' ignorance of Corning's lack of interest in acquiring SRU, the Court concludes that the declaration of Corning's Director of Commercial Technologies, which Corning encourages SRU to provide to potential bidders, will sufficiently appraise potential bidders of Corning's intentions.

Next, [*5] the Court agrees with Corning that the potential negative views held by third parties regarding the efficacy of the Protective Order are insufficient to prevent the disclosure of relevant documents that Corning needs to maintain a defense in this action. In order to permit parties to proceed with litigation involving confidential information, protective orders, such as the one entered in this case, must be respected by the parties and thus are presumed by courts to be effective. Otherwise, many complex cases, particularly patent cases, would be impossible to prosecute and defend. n1

n1 In addition, the Court is not persuaded by the declaration of SRU's Chief Financial Officer that the Court's July 7 Order is unduly oppressive. First, the declarant's opinion is based, in part, on the assumption that potential bidders will be, or are, unaware of Corning's lack of interest in acquiring SRU. As noted above, however, this information is now publicly available. Also, although the Court does not have reason to doubt the declarant's good faith in providing his opinions on the nature of competition in the biosensor industry, the declarant's opinions on how other competitors will regard SRU's discovery obligations are either speculative or based on hearsay, and thus, not sufficient to prevent the Court from ordering the production of relevant documents to Corning.

[*6]

**CONCLUSION**

For the reasons discussed, the Court will deny SRU's Motion. An appropriate Order will be entered.

**ORDER**

At Wilmington, this 13th day of August, 2004, for the reasons discussed in the Memorandum Opinion issued this date;

IT IS HEREBY ORDERED that the Request For Reconsideration Of July 7, 2004 Order Granting Plaintiffs' Motion To Compel And Denying SRU's Motion For Protective Order filed by SRU Biosystems, LLC, SRU Biosystems, Inc., and SRU Biosystems Holdings, LLC (D.I. 173) is **DENIED.**

JOSEPH J. FARNAN, JR.

UNITED STATES DISTRICT JUDGE

# EXHIBIT B

US006679791B2

(12) **United States Patent**
**Watanabe**

(10) **Patent No.: US 6,679,791 B2**
(45) **Date of Patent: Jan. 20, 2004**

(54) **GOLF BALL**

(75) Inventor: **Hideo Watanabe**, Chichibu (JP)

(73) Assignee: **Bridgestone Sports Co., Ltd.**, Tokyo (JP)

( * ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/880,844**

(22) Filed: **Jun. 15, 2001**

(65) **Prior Publication Data**

US 2002/0019269 A1 Feb. 14, 2002

(30) **Foreign Application Priority Data**

Jun. 26, 2000 (JP) ..... 2000-190640

(51) **Int. Cl.**[7] ..... **A63B 37/04**; A63B 37/06; A63B 37/00

(52) **U.S. Cl.** ..... **473/371**; 473/351

(58) **Field of Search** ..... 473/251–377

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*Primary Examiner*—Paul T. Sewell
*Assistant Examiner*—Alvin A. Hunter, Jr.
(74) *Attorney, Agent, or Firm*—Sughrue Mion, PLLC

(57) **ABSTRACT**

A multi-piece golf ball includes a rubbery elastic core, a cover having a plurality of dimples on the surface thereof, and at least one intermediate layer between the core and the cover. The intermediate layer is composed of a resin material which is harder than the cover. The elastic core has a hardness which gradually increases radially outward from the center to the surface thereof. The center and surface of the elastic core have a hardness difference of at least 18 JIS-C hardness units. This construction and combination of features improve the distance of the ball when struck with a driver, provide the ball with excellent spin characteristics and thus good controllability on approach shots, and gives the ball a good feel on impact, enabling the ball to meet the high expectations of skilled golfers.

**27 Claims, 1 Drawing Sheet**

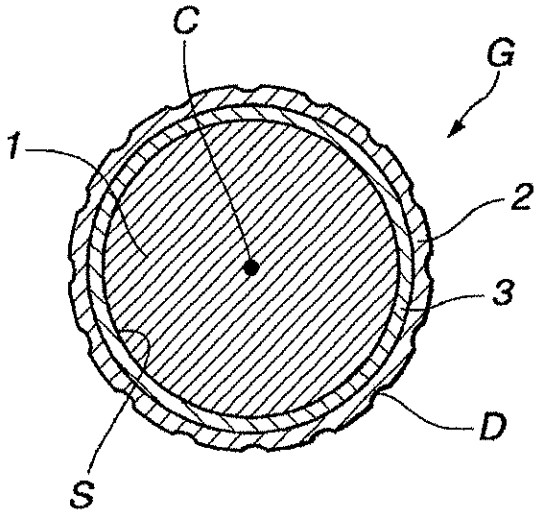
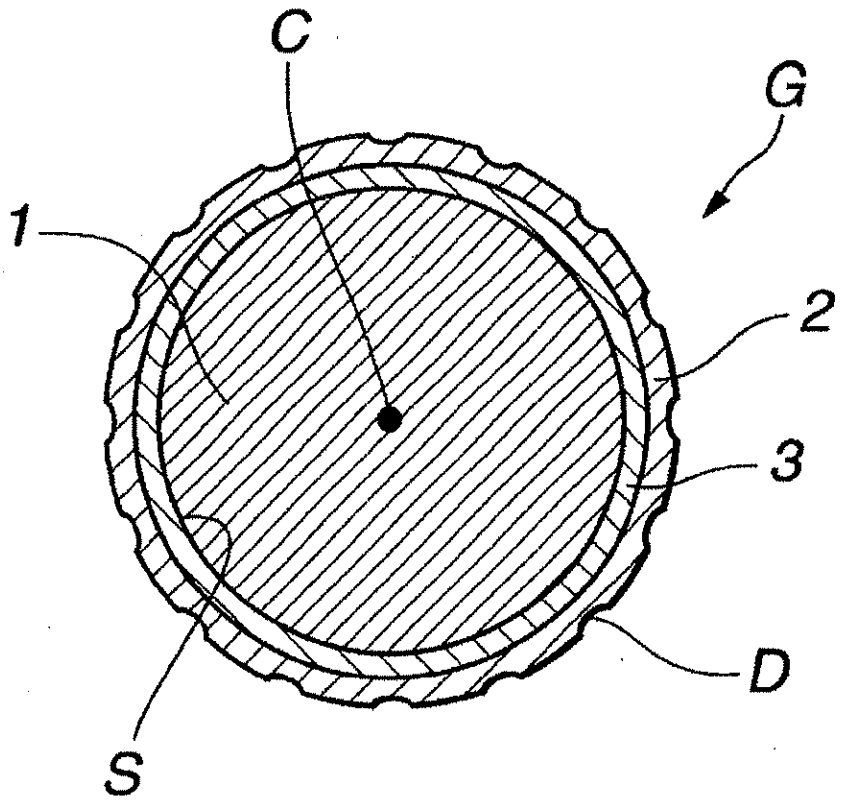


FIG.1



# GOLF BALL

## BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a golf ball having a multilayer construction of at least three layers which includes a core, an intermediate layer and a cover. More particularly, the invention relates to a golf ball which has good rebound characteristics and provides an excellent travel distance, controllability and "feel" upon impact with a golf club.

2. Prior Art

In recent years, solid golf balls, with their good flight performance, have consistently won greater general approval than conventional thread-wound golf balls.

Solid golf ball constructions include two-piece balls made of a solid, high-resilience, rubber core enclosed within a relatively thin resin cover, and multi-piece balls having a core, a cover, and also an intermediate layer therebetween whose properties differ somewhat from those of the cover.

As already noted, because of their good flight performance (i.e., long travel distance), solid golf balls of these types are widely favored by both amateur and professional golfers. Yet, there remains a desire among golfers for even better flight performance.

## SUMMARY OF THE INVENTION

It is therefore an object of the present invention to provide a golf ball having a multilayer construction of three or more layers that is endowed with improved distance without diminishing the controllability and feel that are so important to skilled golfers.

Accordingly, the invention provides a golf ball comprising a rubbery elastic core having a center and a radially outer surface, a cover having a plurality of dimples on the surface thereof, and at least one intermediate layer situated between the core and the cover. The intermediate layer is composed of a resin material which is harder than the cover. The elastic core has a hardness which gradually increases radially outward from the center to the surface thereof, and a difference in JIS-C hardness of at least 18 between the center and the surface.

Preferably, the JIS-C hardness at the center of the core is 50 to 65, and the JIS-C hardness at the surface of the core is 70 to 90. The core typically undergoes a deformation of 3.0 to 5.0 mm when the load applied thereto is increased from an initial load of 98 N (10 kgf) to a final load of 1,275 N (130 kgf).

## BRIEF DESCRIPTION OF THE DRAWING

The objects, features and advantages of the invention will become more apparent from the following detailed description, taken in conjunction with the accompanying diagram.

The only FIGURE, FIG. 1 is a sectional view showing a golf ball according to one embodiment of the invention.

## DETAILED DESCRIPTION OF THE INVENTION

Referring to FIG. 1, the golf ball G of the present invention has a construction composed of at least three layers, commonly known as a "multi-piece construction," which include a rubbery elastic core 1, a cover 2 that is generally made of a resin material and has a plurality of dimples D on the surface thereof, and one or more intermediate layer 3 between the core 1 and the cover 2, all situated in a concentric fashion. The illustrated embodiment has a single intermediate layer. The intermediate layer 3 is made of a resin material which is harder than the cover 2. The core 1 having a center C and a surface S at its radially outer extremity has a JIS-C hardness which gradually increases radially outward from the center C to the surface S. The core 1 is formed so as to have a specific hardness difference between the surface S and the center C.



The inventive golf ball includes a hard intermediate layer disposed between the core, which has an optimized hardness profile, and the cover which is softer than the intermediate layer. This construction provides the ball with an excellent "feel," holds down spin when the ball is struck with a driver, and increases the distance traveled, in part by creating a trajectory which does not describe a high arc when traveling into a headwind. At the same time, it increases the amount of spin on approach shots taken with a club having a large loft angle, thus imparting the excellent control desired in particular by professionals and other skilled golfers.

In the golf ball of the present invention, the core may be made from a known core material which is prepared by blending, for example, a base rubber, the metal salt of an unsaturated carboxylic acid, and an organic peroxide.

The base rubber is preferably polybutadiene. The use of 1,4-polybutadiene, and especially one having a cis structure of at least 40%, is recommended. In addition to the polybutadiene, the base rubber may also include other rubbers such as natural rubber, polyisoprene rubber and styrene-butadiene rubber, if necessary.

Examples of suitable metal salts of unsaturated carboxylic acids include zinc dimethacrylate and zinc diacrylate. Zinc diacrylate is especially preferred for achieving a high rebound energy. It is advantageous to include such unsaturated carboxylic acids in an amount of at least 15 parts by weight, and preferably at least 20 parts by weight, but not more than 50 parts by weight, and preferably not more than 45 parts by weight, per 100 parts by weight of the base rubber.

Examples of suitable organic peroxides include 1,1-bis(t-butylperoxy)-3,3,5-trimethylcyclohexane, dicumyl peroxide, di-(t-butylperoxy)-m-diisopropylbenzene and 2,5-dimethyl-2,5-di-t-butylperoxyhexane. It is advantageous to include such peroxides in an amount of at least 0.1 part by weight, and preferably at least 0.5 part by weight, but not more than 5 parts by weight, and preferably not more than 2 parts by weight, per 100 parts by weight of the base rubber.

To impart good rebound characteristics, it is advisable to include a suitable compounding ingredient such as a thiophenol, thionaphthol, halogenated thiophenol or metal salt thereof in the core material. Specific examples of such compounding ingredients that may be used include pentachlorothiophenol, pentafluorothiophenol, pentabromothiophenol, p-chlorothiophenol and the zinc salt of pentachlorothiophenol. The zinc salt of pentachloro-thiophenol is especially preferred. Such a compounding ingredient is typically included in an amount of at least 0.4 part by weight, and preferably at least 0.6 part by weight, but not more than 2.0 parts by weight, and preferably not more than 1.2 parts by weight, per 100 parts by weight of the base rubber. Too much of this ingredient tends to lower the core hardness, which can adversely impact the feel of the ball when hit as well as its durability (cracking resistance), whereas too little may lower the rebound energy of the core, making it impossible for the ball to achieve a sufficient carry.

If necessary, the core material may include also various additives such as inorganic fillers and antioxidants. Illustrative examples of such additives include zinc oxide, barium sulfate and calcium carbonate.

The core may be fabricated from the above core material by using a conventional process to blend the various ingredients and mold the resulting mixture. For example, the constituent ingredients may be blended in a suitable apparatus such as a Banbury mixer or a kneader to form a "slug," which is then placed in a mold where it is vulcanized at a temperature of generally at least 150° C., and preferably at least 160° C., but generally not more than 190° C., and preferably not more than 180° C. The period of vulcanization is generally at least 8 minutes, and preferably at least 12 minutes, but generally not more than 20 minutes, and preferably not more than 16 minutes.

The weight and diameter of the core may be suitably adjusted according to such factors as the constituent materials and thickness of the intermediate layer and the cover, which are described subsequently. It is recommended that the core generally have a weight of at least 23 g, and preferably at least 30 g, but not more than 37 g, and preferably not more than 35 g. It is also recommended that the core generally have a diameter of at least 33 mm, and preferably at least 36 mm, but not more than 39 mm, and preferably not more than 38 mm.

It is critical for the core to have an optimized hardness profile in which the hardness gradually increases radially outward from the center toward the outside edge or surface of the core. That is, the core has a higher hardness at the surface than at the center.

The core center and surface must have a difference between their respective measured JIS-C hardnesses of at least 18, preferably at least 20, and most preferably at least 22 units. This difference in hardness within the core gives the ball a low spin when hit with a driver (number 1 wood), enabling it to travel well and thus attain a good total distance. Too small a difference in JIS-C hardness between the relatively soft center and the relatively hard surface of the core allows the ball to take on too much spin when hit with a driver, so that it does not travel well and has a short run after it lands on the ground. This makes it impossible to achieve the desired distance. It is recommended that the upper limit in the hardness difference be at most 30, preferably 27 or less, and most preferably 25 units or less.

Specifically, the core at the center typically has a JIS-C hardness of at least 50, and preferably at least 55, but not more than 65, and preferably not more than 62. The core at the surface typically has a JIS-C hardness of at least 70, and preferably at least 75, but not more than 90, and preferably not more than 85. Too low a JIS-C hardness at the core center may deaden the feel and fail to achieve the desired rebound energy, whereas a hardness that is too high may result in an excessively hard feel when the ball is hit. Similarly, too low a JIS-C hardness at the core surface may deaden the feel of the ball when hit, while too high a hardness may result in too hard a feel.

Preferably the core of the inventive golf ball has a deformation of at least 3.0 mm, and preferably at least 3.3 mm, but not more than 5.0 mm, and preferably not more than 4.5 mm, when the load applied thereto is increased from an initial load of 98 N (10 kgf) to a final load of 1,275 N (130 kgf). Too small a deformation may increase the spin when the ball is hit with a driver, preventing the desired travel from being achieved, and may also give the ball too hard a feel. On the other hand, too much deformation may deaden the feel and fail to achieve the necessary rebound energy.



Since the core has a hardness gradually increasing radially outward from the center to the surface thereof and an optimized difference in hardness between the center and the surface where the core is hardest, the inventive golf ball having the above-described core functions to suppress the generation of excessive spin when it is hit with a driver, effectively increasing the run after it lands on the ground, and thus travelling a longer total distance.

The intermediate layer 3 of the inventive golf ball is an essential layer which is situated between the core 1 and the cover 2 of the ball G, as shown in FIG. 1, and is made of a resin material that is harder than the cover material. Even if the core and cover are within the scope of the present invention, a golf ball lacking the adequate intermediate layer prescribed by the present invention fails to attained the objects of the invention since it cannot adequately suppress spin when hit with a driver, making it impossible to achieve a longer travel distance, and gives a poor feel when hit.

The intermediate layer may be made using a known cover material, illustrative examples of which include an ionomer resin, either by itself or in admixture with a polyester, polyurethane, polyamide, polyolefin or polystyrene thermoplastic elastomer. The use of an ionomer resin by itself is especially preferred, although another thermoplastic resin may be used provided the resin material for the intermediate layer has a greater hardness than the cover. As with the cover material described below, pigments and various other additives may be included in the intermediate material.

The intermediate layer can be formed over the surface of the core using a known process, preferably an injection molding process. For example, once the core is placed within a mold, the intermediate layer material is injection molded over the core in a conventional manner.

The intermediate layer must have a greater hardness than the cover, which is described below. If the intermediate layer has a hardness which is the same as or lower than that of the cover, spin is not adequately suppressed when the ball is hit with a driver, in addition to which the ball has a lower rebound energy, preventing the anticipated total distance from being achieved. It is generally advantageous for the intermediate layer and the cover to have a Shore D hardness difference of at least 2, and preferably at least 5 units, but not more than 20, and preferably not more than 15 units.

It is recommended that the intermediate layer itself have a Shore D hardness of generally at least 50, and preferably at least 55, but not more than 67, and preferably not more than 65.

As already noted, the intermediate layer situated between the core and the cover in the golf ball of the invention has a greater hardness than the cover. The hardnesses of the intermediate layer and the core, when compared using the same hardness scale (i.e., JIS-C hardness or Shore D hardness), are preferably such that the intermediate layer has a greater hardness than the surface of the core. The JIS-C hardness difference between the intermediate layer and the core surface is preferably at least 2, and more preferably at least 6 units, but not more than 22, and more preferably not more than 18 units.

It is recommended that the intermediate layer have a thickness which is generally at least 0.5 mm, but not more than 3 mm, and especially not more than 2 mm. In cases where there are two or more intermediate layers, it is advisable to set the overall thickness of the intermediate layers within the above range.

If the golf ball has two or more intermediate layers situated between the core and the cover, the above-described

hardness relationship must be maintained between the cover and the outer intermediate layer which is in close contact with the cover.

The cover of the golf ball is formed of a material which is softer than the intermediate layer material. Examples of suitable cover materials include ionomer resins and polyurethane thermoplastic elastomers which are softer than the intermediate layer material. The use of an ionomer resin is especially preferred.

It is advantageous for the cover to have a Shore D hardness of generally at least 45, and especially at least 48, but not more than 60, and especially not more than 58. A hardness value that is too low may result in increased spin and an inability to achieve the required total distance. On the other hand, a hardness value that is too high may adversely impact the controllability of shots taken with an iron club having a large loft angle, and approach shots.

A conventional process may be used to form the cover. It is especially preferable to use an injection molding process in which a solid core over which an intermediate layer has been formed is placed within a mold, and the cover material is injection molded over the intermediate layer.

It is recommended that the cover generally have a thickness of at least 0.6 mm, and preferably at least 1.0 mm, but not more than 2.1 mm, and preferably not more than 1.8 mm. Too thin a cover may lower the durability of the ball, whereas a cover that is too thick may lower the ball's rebound energy.

Since the golf ball of the invention has an optimized balance in hardness among the various layers as described above, the ball is endowed with an excellent rebound energy, distance performance, feel, controllability and spin characteristics.

For competition play, the golf ball of the invention may be formed so as to have a diameter and weight which conform with the Rules of Golf. That is, the ball may have a diameter of not less than 42.67 mm and a weight of not greater than 45.93 g.

The inventive golf ball provides increased distance when hit with a driver. On approach shots, the ball has excellent spin characteristics to ensure control as desired. Moreover, it has a good feel on impact. This combination of qualities enables the ball to satisfy the high expectations of skilled golfers in particular.

## EXAMPLES

Examples of the invention and comparative examples are given below by way of illustration, and are not intended to limit the invention.

### Examples 1-3 and Comparative Examples 1-5

To ascertain the flight characteristics and feel of golf balls according to one embodiment of the invention, golf balls with different hardnesses at the center and surface of the core were produced in Examples 1, 2 and 3. A number of additional examples were carried out for the purpose of comparison. The golf balls produced in Comparative Example 1 had cores with a small or flat hardness profile. The balls produced in Comparative Example 2 had cores with a noticeable, yet gradual, hardness profile. The balls produced in Comparative Example 3 had a core with a distinct hardness profile, but had an intermediate layer that was softer than the cover. The balls produced in Comparative Examples 4 and 5 similarly had cores with distinct hardness profiles, but lacked an intermediate layer. Comparative tests were conducted on these various balls.

The balls were all given the same arrangement of dimples on the surface of the cover. Namely, each ball had a total of 432 dimples of three types formed on the cover in an icosahedral arrangement.

Tables 1 and 2 below show the characteristics of the cover and intermediate layer in the ball samples in each example. Table 3 gives the characteristics of the core in the same balls, and Table 4 presents the test results obtained for each type of ball.

TABLE 1

| | | Example | | | Comparative Example | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1 | 2 | 3 | 4 | 5 |
| Cover | Material | a | a | a | a | a | b | a | a |
| | Thickness (mm) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| | Hardness (Shore D) | 55 | 55 | 55 | 55 | 55 | 65 | 55 | 55 |
| Inter-mediate layer | Material | b | b | b | b | b | a | — | — |
| | Thickness (mm) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | — | — |
| | Hardness (Shore D) | 65 | 65 | 65 | 65 | 65 | 55 | — | — |

TABLE 2

| Cover, intermediate layer | | a | b |
|---|---|---|---|
| Composition (parts by weight) | Himilan AM7317 (Zn)[1] | | 50 |
| | Himilan 1650 (Zn)[2] | 50 | |
| | Himilan AM7318 (Na)[3] | | 50 |
| | Surlyn 8120 (Na)[4] | 50 | |
| | Titanium oxide | 5 | 5 |
| Hardness | Shore D hardness | 55 | 65 |
| | JIS-C hardness | 80 | 94 |

[1]A zinc ionomer resin having an acid content of 18% made by DuPont-Mitsui Polychemicals Co., Ltd.
[2]A zinc ionomer resin made by DuPont-Mitsui Polychemicals Co., Ltd.
[3]A sodium ionomer resin having an acid content of 18% made by DuPont-Mitsui Polychemicals Co., Ltd.
[4]A sodium ionomer resin made by E. I. DuPont de Nemours and Co.

TABLE 3

| | | | Example | | | Comparative Example | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 1 | 2 | 3 | 4 | 5 |
| Core | Composition (pbw) | 1,4-cis-Polybutadiene | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| | | Zinc diacrylate | 41.0 | 38.0 | 35.0 | 28.0 | 27.8 | 38.0 | 32.1 | 28.4 |
| | | Peroxide (1)[1] | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| | | Peroxide (2)[2] | 0.8 | 0.8 | 0.8 | 0.6 | 0.6 | 0.8 | 0.8 | 0.8 |
| | | Sulfur[3] | 0.1 | 0.1 | 0.1 | 0 | 0 | 0.1 | 0.1 | 0.1 |
| | | Antioxidant[4] | 0 | 0 | 0 | 0.2 | 0.2 | 0 | 0 | 0 |
| | | Barium sulfate | 24.1 | 25.2 | 26.4 | 29.8 | 29.9 | 25.2 | 12.8 | 14.4 |
| | | Zinc oxide | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |

TABLE 3-continued

| | | | Example | | | Comparative Example | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 1 | 2 | 3 | 4 | 5 |
| | Zinc salt of pentachlorothiophenol | | 1 | 1 | 1 | 0.2 | 0.2 | 1 | 1 | 1 |
| Vulcanization conditions | Primary | Temperature (° C.) | 175 | 175 | 175 | 140 | 155 | 175 | 175 | 175 |
| | | Time (min) | 15 | 15 | 15 | 30 | 15 | 15 | 15 | 15 |
| | Secondary | Temperature (° C.) | — | — | — | 165 | — | — | — | — |
| | | Time (min) | — | — | — | 15 | — | — | — | — |
| Hardness | Surface (JIS-C hardness) | | 85 | 83 | 78 | 76 | 76 | 83 | 87 | 80 |
| | Center (JIS-C hardness) | | 61 | 59 | 55 | 72 | 60 | 59 | 63 | 56 |
| | JIS-C hardness difference | | 24 | 24 | 23 | 4 | 16 | 24 | 24 | 24 |
| Deformation under loading (mm)[5)] | | | 3.4 | 3.8 | 4.1 | 3.3 | 3.4 | 3.8 | 3.4 | 4.1 |

[1)]Dicumyl peroxide, produced by NOF Corporation under the trade name Percumyl D.
[2)]1,1-Bis(t-butylperoxy)-3,3,5-trimethylcyclohexane, produced by NOF Corporation under the trade name Perhexa 3M-40.
[3)]Zinc white-containing sulfur, produced by Tsurumi Chemical Industry Co., Ltd.
[4)]Nocrack NS-6, produced by Ouchi Shinko Chemical Industrial Co., Ltd.
[5)]Deformation under loading from an initial load of 98 N to a final load of 1,275 N.

TABLE 4

| | | Example | | | Comparative Example | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1 | 2 | 3 | 4 | 5 |
| Flight[1)] | Carry (m) | 233.0 | 232.2 | 231.1 | 233.2 | 232.1 | 232.5 | 231.8 | 229.5 |
| | Total distance (m) | 241.2 | 243.8 | 244.9 | 238.5 | 239.9 | 245.5 | 238.3 | 241.1 |
| | Spin (rpm) | 2805 | 2745 | 2700 | 2910 | 2855 | 2550 | 2952 | 2847 |
| | Rating | good | good | good | poor | poor | good | poor | fair |
| Approach[2)] | Spin (rpm) | 5833 | 5821 | 5811 | 5849 | 5830 | 4100 | 5870 | 5832 |
| | Rating | good | good | good | good | good | poor | good | good |
| Feel[3)] | When hit with driver | good | good | good | good | good | good | good | poor |
| | When hit with putter | good | good | good | good | good | poor | good | good |

[1)]Flight was rated as follows, based on distance measured when ball was hit at a head speed of 50 m/s by a driver mounted on a swing robot.
Good: Total distance at least 241 m
Fair: Total distance at least 241 m, but carry less than 230 m
Poor: Total distance 240 m or less.
[2)]Approach was rated as follows, based on spin rate measured when ball was hit at a head speed of 19 m/s by a sand wedge mounted on a swing robot.
Good: Good spin (at least 5,500 rpm)
Poor: Inadequate spin (less than 4,500 rpm)
[3)]Average sensory evaluations for five professional golfers:
Good: Feel was appropriate and good.
Poor: Feel was too hard or too soft.

As is apparent from the results in Table 4, the golf balls according to the invention all showed a good balance of distance, controllability on approach shots, and feel.

By contrast, the golf balls produced in the comparative examples each had drawbacks. In Comparative Examples 1 and 2, the hardness difference between the surface and center of the core was less than 18, resulting in much spin and a poor distance when the ball was hit with a driver. In Comparative Example 3, the cover was harder than the intermediate layer, and had an excessively high hardness. As a result, the amount of spin on approach shots was low and controllability was poor. In addition, the feel when hit with a putter was poor. The golf balls produced in Comparative Example 4 were two-piece balls which lacked between the cover and the core an intermediate layer of greater hardness than the cover. These balls had a lot of spin when hit with a driver, and thus a poor distance. In the golf balls produced in Comparative Example 5, the core hardness was lowered to reduce the high spin rate on impact with a driver in Comparative Example 4, but the resulting feel on impact with a driver was too soft.

Japanese Patent Application No. 2000-190640 is incorporated herein by reference.

Although some preferred embodiments have been described, many modifications and variations may be made thereto in light of the above teachings. It is therefore to be understood that the invention may be practiced otherwise than as specifically described without departing from the scope of the appended claims.

What is claimed is:

1. A golf ball comprising a rubbery elastic core having a center and a radially outer surface, a cover having a plurality of dimples on the surface thereof, and at least one intermediate layer situated between the core and the cover; wherein

said intermediate layer is composed of a resin material which is harder than the cover and has a greater hardness than the surface of the elastic core when compared using the same hardness scale, and

said elastic core has a hardness which gradually increases radially outward from the center to the surface thereof, and a difference in JIS-C hardness of at least 22 between the center and the surface.

2. The golf ball of claim 1, wherein said core at the center has a JIS-C hardness of 50 to 65, and at the surface a JIS-C hardness of 70 to 90.

3. The golf ball of claim 1, wherein said core undergoes a deformation of 3.0 to 5.0 mm when the load applied

thereto is increased from an initial load of 98 N (10 kgf) to a final load of 1,275 N (130 kgf).

4. The golf ball of claim 1, wherein the difference in JIS-C hardness between the center of the elastic core and the surface thereof is 22 to 30 units.

5. The golf ball of claim 1, wherein the intermediate layer has a Shore D hardness of 50 to 67.

6. The golf ball of claim 1, wherein the JIS-C hardness difference between said intermediate layer and said core surface is 2 to 22 units.

7. The golf ball of claim 1, wherein the cover has a Shore D hardness of 45 to 60.

8. The golf ball of claim 1, wherein the golf ball has two or more intermediate layers situated between the core and the cover, and said hardness relationship is maintained between the cover and the outer intermediate layer which is in close contact with the cover.

9. The golf ball of claim 1, wherein the core is formed of rubber as a base and the cover is formed of materials including ionomer resins and polyurethane thermoplastic elastomers.

10. The golf ball of claim 1, wherein said elastic core is formed of rubber as the base material comprising an ingredient selected from a group consisting of thiophenol, thionaphthol, halogenated thiophenol and metal salt thereof.

11. The golf ball of claim 1, wherein said elastic core is formed of rubber as the base material comprising an ingredient selected from a group consisting of pentachlorothiophenol, pentafluorothiophenol, pentabromothiophenol, p-chlorothiophenol and the zinc salt of pentachlorothiophenol.

12. The golf ball of claim 1, wherein said elastic core is formed of rubber as the base material comprising an ingredient of zinc salt of pentachlorothiophenol added in an amount of 0.4 to 2.0 parts by weight, to per 100 parts by weight of the base rubber.

13. A golf ball comprising a rubbery elastic core having a center and a radially outer surface, a cover having a plurality of dimples on the surface thereof, and at least one intermediate layer situated between the core and the cover; wherein

said intermediate layer is composed of a resin material which is harder than the cover, and has a greater hardness than the surface of the elastic core when compared using the same JIS-C hardness scale, and

said elastic core has a hardness at the center and a hardness at the surface thereof which is greater than the hardness at the center thereof, and a difference in JIS-C hardness of at least 22 between the center and the surface.

14. The golf ball of claim 13, wherein said core at the center has a JIS-C hardness of 50 to 65, and at the surface a JIS-C hardness of 70 to 90.

15. The golf ball of claim 13, wherein the difference in JIS-C hardness between the center of the elastic core and the surface thereof is 22 to 30 units.

16. The golf ball of claim 13, wherein the intermediate layer has a Shore D hardness of 50 to 67.

17. The golf ball of claim 12, wherein the JIS-C hardness difference between said intermediate layer and said core surface is 2 to 22 units.

18. The golf ball of claim 12, wherein the cover has a Shore D hardness of 45 to 60.

19. The golf ball of claim 12, wherein the golf ball has two or more intermediate layers situated between the core and the cover, and said hardness relationship is maintained between the cover and the outer intermediate layer which is in close contact with the cover.

20. The golf ball of claim 12, wherein the core is formed of rubber as a base and the cover is formed of materials including ionomer resins and polyurethane thermoplastic elastomers.

21. The golf ball of claim 13, wherein said elastic core is formed of rubber as the base material comprising an ingredient selected from a group consisting of thiophenol, thionaphthol, halogenated thiophenol and metal salt thereof.

22. The golf ball of claim 13, wherein said elastic core is formed of rubber as the base material comprising an ingredient selected from a group consisting of pentachlorothiophenol, pentafluorothiophenol, pentabromothiophenol, p-chlorothiophenol and the zinc salt of pentafluorothiophenol.

23. The golf ball of claim 13, wherein said elastic core is formed of rubber as the base material comprising an ingredient of zinc salt of pentachlorothiophenol added in an amount of 0.4 to 2.0 parts by weight, to per 100 parts by weight of the base rubber.

24. A golf ball comprising a rubbery elastic core having a center and a radially outer surface, a cover having a plurality of dimples on the surface thereof, and at least one intermediate layer situated between the core and the cover; wherein

said intermediate layer is composed of a resin material which is harder than the cover having a Shore D hardness of 45 to 58 and has a greater hardness than the surface of the elastic core when compared using the same hardness scale, and

said elastic core has a hardness at the center and a hardness at the surface thereof which is greater than the hardness at the center thereof, and a difference in JIS-C hardness of at least 22 between the center and the surface.

25. The golf ball of claim 24, wherein said elastic core is formed of rubber as the base material comprising an ingredient selected from a group consisting of thiophenol, thionaphthol, halogenated thiophenol and metal salt thereof.

26. The golf ball of claim 24, wherein said elastic core is formed of rubber as the base material comprising an ingredient selected from a group consisting of pentachlorothiophenol, pentafluorothiophenol, pentabromothiophenol, p-chlorothiophenol and the zinc salt of pentachlorothiophenol.

27. The golf ball of claim 24, wherein said elastic core is formed of rubber as the base material comprising an ingredient of zinc salt of pentachlorothiophenol added in an amount of 0.4 to 2.0 parts by weight, to per 100 parts by weight of the base rubber.

* * * * *

# EXHIBIT C

**THIS EXHIBIT HAS BEEN REDACTED IN ITS ENTIRETY**

# EXHIBIT D

**THIS EXHIBIT HAS BEEN REDACTED IN ITS ENTIRETY**

# EXHIBIT E

**THIS EXHIBIT HAS BEEN REDACTED IN ITS ENTIRETY**

# EXHIBIT F

LEXSEE

Caution
As of: Feb 06, 2007

**INLINE CONNECTION CORPORATION, BROADBAND TECHNOLOGY INNOVATIONS, LLC, AND PIE SQUARED, LLC, Plaintiffs, v. AOL TIME WARNER INCORPORATED, et al., Defendants. INLINE CONNECTION CORPORATION, BROADBAND TECHNOLOGY INNOVATIONS, LLC, AND PIE SQUARED, LLC, Plaintiffs, v. EARTHLINK, INC., Defendant.**

**C. A. No. 02-272-MPT, C. A. No. 02-477-MPT Consolidated Cases**

**UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE**

**2007 U.S. Dist. LEXIS 6207**

**January 29, 2007, Decided**
**January 29, 2007, Filed**

**PRIOR HISTORY:** Inline Connection Corp. v. AOL Time Warner, Inc., 2007 U.S. Dist. LEXIS 4761 (D. Del., Jan. 23, 2007)

**CORE TERMS:** patent, secondary, obviousness, enablement, specification, invention, enabled, unreliable, monocot, patentee, full scope, cell, distance, feet, infringement, reliability, plant, infringing, prima facie, nonobviousness, case law, transmission, invalidity, evaluated, telephone, wiring, signals, teach, miles, required to provide

**COUNSEL:** [*1] For Inline Connection Corporation, Plaintiff: Julia Heaney, Thomas C. Grimm, LEAD ATTORNEYS, Morris, Nichols, Arsht & Tunnell, Wilmington, DE.

For Broadband Technology Innovations LLC, Pie Squared LLC, Plaintiffs: Julia Heaney, Morris, Nichols, Arsht & Tunnell, Wilmington, DE.

For America Online, Inc., Defendant: Frederick L. Cottrell, III, LEAD ATTORNEY, Chad Michael Shandler, Kelly E. Farnan, Richards, Layton & Finger, Wilmington, DE.

For EarthLink Inc., Defendant: Gary William Lipkin, LEAD ATTORNEY, Duane Morris LLP, Wilmington, DE.

For America Online, Inc., Counter Claimant: Frederick L. Cottrell, III, LEAD ATTORNEY, Richards, Layton & Finger, Wilmington, DE.

Broadband Technology Innovations LLC, Counter Defendant, Pro se.

Pie Squared LLC, Counter Defendant, Pro se.

**JUDGES:** Mary Pat Thynge, UNITED STATES MAGISTRATE JUDGE.

**OPINION BY:** Mary Pat Thynge

**OPINION:**

**MEMORANDUM ORDER**

**I. INTRODUCTION**

This is a patent infringement case. Inline

Communication Corporation n1 ("Inline") sued America Online Inc. ("AOL") on April 12, 2002, and EarthLink, Inc. ("EarthLink") on June 4, 2002, alleging infringement of U.S. Patent Nos. 5,844,596 ("the '596 patent"), 6,243,446 [*2] ("the '446 patent"), and 6,236,718 ("the '718 patent"). n2

n1 Inline initially sued AOL and Earthlink. Since the original filing of the complaints, other plaintiffs have been added because of their contractual relationships with Inline. For ease of reference, all plaintiffs shall be referred to as Inline.

n2 Inline's U.S. Patent No. 6,542,585 ("the '585 patent") was subsequently added to the litigation after it was issued in 2003. The '718 patent is no longer at issue in the litigation.

Inline filed two separate motions n3 requesting that the court preclude defendants' invalidity expert, David L. Waring, from offering certain testimony at trial. Inline's motion under consideration is directed at Waring's April 18, 2006 Expert Report (the "April 18 Report") reciting his opinions of lack of enablement and obviousness. n4 Inline contends that the opinions recited therein are the product of improper standards and unreliable methods. For the reasons discussed, Inline's motion will be granted in part and denied [*3] in part.

n3 Inline's second motion is directed at Waring's October 20, 2006 Supplemental Expert Report (the "Supplemental Report"), which plaintiffs argue should be excluded as untimely. The Supplemental Report was the subject of the court's January 8, 2007 memorandum opinion, D.I. 593.

n4 D.I. 524 (Motion to Exclude Certain Testimony Waring's Expert Report).

## II. POSITIONS OF THE PARTIES

Plaintiffs contend that Waring's opinions on enablement and obviousness are unreliable and, therefore, will not assist the trier of fact and should be excluded under Federal Rule of Evidence 702.

Inline first argues that the enablement analysis recited in the April 18 Report is unreliable because it concerns only whether the patents enable *the accused infringing system,* not whether they enable the claimed invention as required under a proper enablement analysis. Inline concludes, therefore, that Waring's use of the purportedly incorrect legal standard renders his enablement [*4] testimony unreliable. Inline also argues that Waring ignored several secondary considerations in forming his obviousness opinions and, as a result, his opinion on obviousness is unreliable.

Defendants contend that Inline misstates the law of enablement and obviousness and should be denied. Defendants argue that the crux of Inline's argument on enablement is that Waring did not consider enablement of the claimed invention, but rather considered enablement of the accused product (ADSL) and, therefore, applied the wrong law, thereby rendering his methodology fatally flawed. Defendants maintain that Inline's argument is largely one of semantics and without merit. Accordingly to defendants, in determining what the "full scope" of the claims is, Waring merely assumed Inline's contention that ADSL falls within the scope of the claims. Defendants analyze that since ADSL is an end-to-end digital transmission system spanning potentially thousands of feet of telephone lines using frequencies up to 1 MHZ and if Inline is correct that a system utilizing the public telephone network over a distance of several miles is within the scope of the claims, then it necessarily follows that such a system [*5] must be enabled by the specification of the patents-in-suit.

Defendants also state that Inline ignores the Federal Circuit's requirement that the patent specification must enable the full scope of the claims, and has expressly endorsed defendants' enablement analysis in *Plant Genetic Sys. v. DeKalb Genetics Corp.* n5 Defendants emphasize the Federal Circuit's comment that "PSG [the patent holder] concedes that the cell claims cover monocot cells. Only by doing so can PSG sue DeKalb, which makes monocot products, for infringement." Defendants note because the patent at issue in *Plant Genetic* did not enable monocot cells -- *i.e.,* the element accused of infringing the claims -- the Federal Circuit held that the patent was not enabled. Consistent with *Plant Genetic,* defendants contend that Waring evaluated the common specification and determined that it does not teach how to transmit digital signals over several miles over the public telephone network and thus, the

specification does not enable the broad patent claims asserted here, rendering them invalid.

n5 315 F.3d 1335, 1341 (Fed. Cir. 2003).

[*6]

With regard to Waring's opinion on obviousness, defendants maintain that Inline misapprehends the role of secondary considerations of non-obviousness in the analysis of whether a patent claim is invalid under 35 U.S.C. § 103. They contend that Inline asserts, without support, that experts in patent cases are *required* to provide detailed analysis of every single factor ever identified by the Federal Circuit as potentially pertinent to the obviousness inquiry. n6 Since secondary considerations are a means for a *patentee* to rebut a prima facie showing of obviousness, defendants argue that they do not bear the burden of showing the absence of such factors, and Waring had no obligation to analyze any secondary considerations of non-obviousness in setting forth his prima facie case of invalidity. Defendants maintain that Waring actually gave more thought to secondary considerations than Inline's own validity expert, (including the failure of others to solve the problem addressed by the patents and long-felt need to do so), and concluded that they cannot overcome defendants' prima facie showing of obviousness. Defendants conclude that Waring's expert opinions [*7] on enablement and obviousness are, thus, firmly grounded on correct legal standards and Inline's motion should be denied.

n6 *See* *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1360 (Fed Cir. 2006) (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17, 86 S. Ct. 684, 15 L. Ed. 2d 545 (1996)) (determination of obviousness depends upon, among other things *relevant* secondary considerations, including commercial success, long felt but unsolved needs, and failure of others).

Inline responds that defendants concede that Waring did not evaluate whether the patent enabled the claimed invention and that Waring's opinion was limited to whether the patent enabled the accused system. Inline contends that, according to defendants' logic, if the accused system infringes the patents-in-suit, then the accused system must define the full scope of the claimed system, and therefore the specification must enable the accused system. According to Inline, the flaw in this logic is that the accused [*8] system--infringing or not--does *not* define the full scope *of the claimed system.* Rather, the full scope of the claimed system is defined *by the claim terms* as construed by the courts. Thus, a proper enablement analysis consists of comparing the claims as construed to the specification to see if they are enabled, but Waring did not do this.

Regarding obviousness, Inline argues that there is no case law which allows an expert to ignore secondary considerations. Inline contends that the Federal Circuit has clearly stated that "evidence of secondary considerations may often be *the most probative and cogent evidence* in the record. It may often establish that an invention appearing to have been obvious in light of the prior art was not." n7

n7 *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1538 (Fed. Cir. 1983) (emphasis added).

Inline also cites the requirement of Rule 702 that expert opinions be the product of reliable principles and methods that have been applied reliably to [*9] the facts of the case. Inline concludes in light of the importance that the Federal Circuit places on secondary considerations, they constitute well-known principles that other experts would consider when rendering an invalidity opinion, and thus, the failure of Waring to consider such principles or use methods typically considered or used by other experts (that is, by ignoring evidence of secondary considerations that Inline claims to exist) renders his opinion unreliable. n8

n8 *See, e.g.*, *In re TMI Litigation*, 193 F.3d 613, 669 (3d Cir. 1993).

Inline also relies on Federal Rule of Civil Procedure ("FRCP") 26(a)(2)(B). Inline claims that Waring's report fails to meet this rule because as an expert, Waring must set forth "a complete statement of all opinions to be expressed and the basis therefore," including "data or other information considered by the witness in forming

the opinions. . . ." Because Waring does not address all secondary considerations, [*10] Inline argues that Waring's analysis is incomplete and thus, unreliable.

**III. DISCUSSION**

Federal Rule of Civil Procedure 26(a)(2)(B) requires an expert report to "contain a complete statement of all opinions to be expressed and the basis and reasons therefore." Rule 26(a)(2)(C) also states that "[t]he parties shall supplement these disclosures when required under subdivision (e)(1)." Rule 26(e)(1) provides that "a party is under a duty to supplement. . . its disclosures under subdivision (a)" when the information previously disclosed is incomplete or incorrect and the additional or corrective information has not been provided to the other parties during the discovery process. Further, in the case of an expert who is required to provide a report pursuant to 26(a)(2)(B), the obligation to supplement extends to the information contained in the report and through deposition of the expert.

The determination of whether to exclude evidence is committed to the court's discretion. The Third Circuit has noted, however, that:

> While evidentiary ruling are generally subject to a particularly high level of deference because the trial court [*11] has a superior vantage point to assess the evidence . . ., evaluating the reliability of scientific methodologies and data does not generally involve assessing the truthfulness of the expert witnesses and thus is often not significantly more difficult on a cold record. Moreover, here there are factors that counsel in favor of a hard look at (more stringent review of) the district court's exercise of discretion. For example, because the reliability standards of Rules 702 and 703 is somewhat amorphous, there is a significant risk that district judges will set the threshold too high and will in fact force plaintiffs to prove their case twice. Reducing this risk is particularly important because the Federal Rules of Evidence display a preference for admissibility.

The Third Circuit also noted that "'the exclusion of critical evidence is an 'extreme' sanction, not normally to be imposed absent a showing of willful deception or 'flagrant disregard' of a court order by the proponent of the evidence,'" n9 and identified several factors for the court to consider in deciding whether to exclude testimony:

> (1) the prejudice or surprise in fact of the party against whom the excluded [*12] witnesses would have testified, (2) the ability of that party to cure the prejudice, (3) the extent to which waiver of the rule against calling unlisted witnesses would disrupt the orderly and efficient trial of the case or of other cases in the court, and (4) bad faith or willfulness in failing to comply with the district court's order. n10

The Third Circuit clearly emphasized that "'the importance of the excluded testimony' should be considered." n11

n9 *Paoli*, 35 F.3d at 791-92 (quoting *Meyers v. Pennypack Woods Home Ownership Ass'n*, 559 F.2d 894, 905 (3d Cir. 1977)).

n10 *Paoli*, 35 F.3d at 791.

n11 *Konstantopoulos v. Westvaco Corp.*, 112 F.3d 710, 719 (3d Cir. 1997) (quoting *Meyers v. Pennypack Woods Home Ownership Ass'n*, 559 F.2d 894, 904 (3d cir. 1977)).

None of the cases cited by defendants hold that the patent must enable the accused product, nor that the accused product is what defines the full scope of [*13] the invention and defendants' reliance on *Plant Genetic* for this proposition is misplaced. The patent in that case taught a genetically engineered plant cell that could prevent herbicides from blocking the function of glutamine synthetase. The parties had *stipulated* for construction purposes that the scope of certain claims was construed to cover all plant cells, both "monocot" plants and "dicot" plants. Thus "whether the cell claims of the '236 patent, which are *agreed by the parties* literally to cover all plant cells [monocots and dicots], were enabled for monocots on March 11, 1987" was the issue. n12 In other words, the district court looked at the claim terms as construed and evaluated whether the specification enabled it -- just as the law requires. n13 That the claim

had to read onto monocots in order to sustain the plaintiff's infringement claim was an interesting side story, but, contrary to defendants' assertion, did not factor into the court's enablement decision. n14 Thus, *Plant Genetic* actually undermines defendants' argument.

n12 *Plant Genetic*, 315 F.3d at 1338.

[*14]

n13 *Id.* at 1338, 1341.

n14 *Id.*

By requiring that the patent enable an end-to-end ADSL system, defendants ignore the rule that the specification "need not enable anything broader than the scope of the claims." n15 This protects patentees from having someone avoid infringement merely by adding one additional element to an otherwise infringing product. n16 This distinction is particularly important in the present matter because the accused system contains features that are not part of the claimed system, but which Waring contends must be enabled by the specification. For example, according to Waring, "ADSL is designed to operate over distances of up to approximately three miles [approx. 18,000 feet] and do so without any additional amplification mid-way along the transmission path." He concludes that 1,000 feet is the farthest distance discussed in the patent specifications, and therefore, the patents do not enable one of ordinary skill in the art to make an ADSL system which operates distances of 18,000 feet. Inline's expert, Jackson explains that the patents need not [*15] enable a distance of 18,000 feet let alone an entire ADSL system: "the patents do not teach television or ADSL or Ethernet. Rather, they teach a system that allows one to transmit television or ADSL or Ethernet or yet-uninvented signals on telephone wiring without interference to the telephone service on that wiring. . . . But, someone provisioning ADSL can elect to use the invention of the patents in suit in order to gain the efficiencies that the invention delivers."

n15 *See* *Neutrino Dev. Corp. v. Sonosite, Inc.*, 410 F. Supp. 2d 529, 542 (S.D. Tex. 2006).

n16 *See* *N. Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931 (Fed. Cir. 1990).

Thus, while defendants' ADSL service allegedly uses the claimed system to infringe, that does not mean that the patent specification must enable the ADSL service as opposed to merely the claimed system. n17

n17 *See* *SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 880 (Fed. Cir. 2004) (to satisfy enablement, the specification need not describe every conceivable embodiment, and the claimed invention need not be perfect in operation).

[*16]

At no time did Waring evaluate whether the patents would enable one of skill in the art to make or use *the claimed invention* without undue experimentation. Indeed, Waring contends--incorrectly--that the claimed invention involves only the transmission of analog video signals over existing telephone wiring. Yet, he never evaluated whether the patents would have enabled one to practice *that* invention. Because Waring did not conduct a proper enablement analysis, his opinion is not reliable and is not admissible on enablement. n18 As a result, Waring's opinion and testimony regarding enablement is excluded.

n18 *See* *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 746 (3d Cir. 1994).

Inline's argument, however, on obviousness is completely contrary to clear Federal Circuit law stating that secondary considerations are a means for a *patentee (i.e.,* Inline) to *rebut* a prima facie showing of obviousness by a defendant. n19 Further, the case law cited by Inline does not examine the issue [*17] of secondary considerations with regard to expert opinions on obviousness. Rather, the case law cited by Inline shows that the trial court as the *fact finder* is obligated to consider evidence of nonobviousness when reaching its conclusion on obviousness. n20 A defendant does not bear the burden of showing the absence of such factors. Moreover, as evidenced by the cases cited by the defendants, those factors need not be considered at all if they are not relevant. Inline's assertion that the Federal Circuit has identified 10 factors that an expert must

consider is misplaced. Whether Waring adequately addressed or failed to address relevant secondary considerations goes to weight, not reliability under FRE 702.

N19 *See* Alza Corp. v. Mylan Labs., Inc., 464 F.3d 1286, 1293 (Fed. Cir. 2006) (secondary considerations are available for a *patentee* to use in rebutting a *prima facie* case of obviousness.; Syntex (U.S.A.) LLC v. Apotex, Inc., 407 F.3d 1371, 1383 (Fed. Cir. 2005) ("[T]he secondary consideration[s] . . . exist[] largely to provide a *means for patentees* to show in close cases that subject matter that appears obvious is in law unobvious . . . .") (emphasis added).

[*18]

n20 *See* Ruiz v. AB Chance Co., 234 F.3d 654, 667 (Fed. Cir. 2000) (holding that the district court erred in failing to consider or discuss evidence of secondary considerations; citing precedent that where secondary considerations are present, they must be considered); Ashland Oil Inc. v. Delta Resins and Refractories Inc., 776 F. 2d 281, 306 (Fed. Cir. 1985) (finding that it was legal error for a district court to fail to consider relevant evidence of secondary considerations); *cf.* Brown & Williamson v. Philip Morris, 229 F.3d 1120, 1131 (Fed. Cir. 2000) (where the failure of the district court to cite to secondary considerations alone is not reversible error; thus, although the court did not consider certain objective evidence of nonobviousness, such error was harmless because the patentee could not overcome strong evidence of nonobviousness); Simmons Fastener Corp. v. Illinois Tool Works, Inc., 739 F.2d 1573, 1575 (Fed. Cir. 1984) ("Trial court's error lies in its exclusion of such evidence in arriving at a conclusion on the obviousness of the claimed invention.").

[*19]

Inline's argument regarding the application of FRCP 26(a)(2)(B) as an element of an expert's qualification misinterprets and misapplies the rule. As noted in the *Advisory Committee Notes,* n21 the goal of the 1993 changes was to have the expert reports set forth the "substance of *direct* examination," written so that the reports "reflect the testimony to be given by the witness." Nothing in Rule 26 suggests that expert testimony be excluded based on the reliability of the conclusions of the expert.

n21 FRCP 26(a)(2)(B) *Advisory Committee Notes,* 1993.

As a result, Inline's motion to exclude Waring's opinion of obviousness is denied. Inline's motion to exclude Waring's opinion of enablement is granted.

January 29, 2007

Mary Pat Thynge

UNITED STATES MAGISTRATE JUDGE